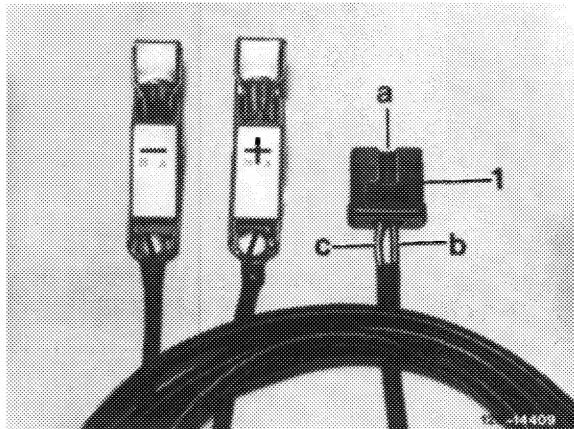


**Self-made tool**

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Coupling (1), part No. 002 545 49 28  
approx. 1 m cable 1.5 mm<sup>2</sup> black (b) +  
approx. 1 m cable 1.5 mm<sup>2</sup> brown (c) –  
1 cable terminal +  
1 cable terminal –

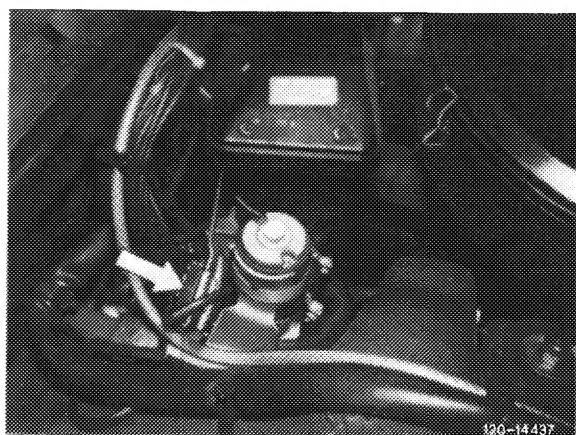


**A. De-oiling**

1 Completely drain coolant (20-010).

2 Remove coolant thermostat (20-110).

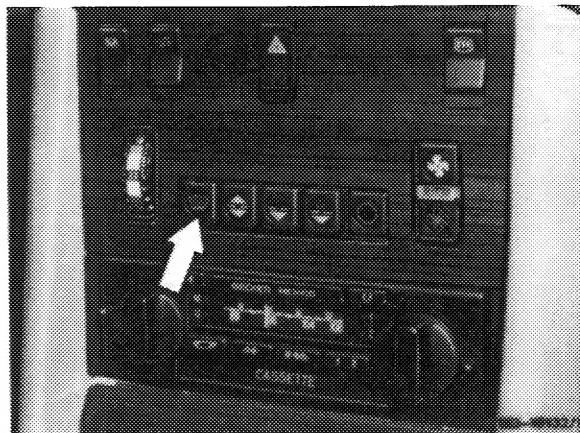
3 On model 116 pull plug of heating water pump (arrow) from supply line. Connect heating water pump to battery by means of self-made tool. Push "DEF" button.



120-14437

**On model 123 with automatic climate control and on model 126, push "DEF" button (arrow).**

**On model 123 with and without air conditioning, set heater lever to max. heating capacity.**



**4 Fill cooling system with a 5 % solution of water and a neutral cleaner, or with a mildly alkaline cleaner such as P 3-Croni (supplier: Henkel) or Grisiron 7220 (supplier: Farbwerke Hoechst).**

**Attention!**

On model 116 with heavy-metal radiator, a strongly alkaline cleaner, e.g. P 3-Standard (supplier: Henkel) may be used instead of a mildly alkaline cleaner. Strongly alkaline cleaners may not be used on models 123 and 126 with light alloy radiator.

**5 Run engine warm at medium speed up to approx. 80 °C (176 °F) and hold at this temperature for approx. 5 minutes.**

**6 Stop engine and permit cooling system to cool down to approx. 50 °C (122 °F).**

**7 Completely drain solution.**

**8 Immediately thereafter, fill cooling system twice with fresh water, run warm (approx. 5 minutes) and drain.**

## B. Decalcification, derusting

**Attention!**

Prior to decalcification, be sure to de-oil cooling system, even if there is no visible oiling up.

**1 After second flushing job during de-oiling, fill cooling system with a 10 % (100 g/l) solution of water and citric acid, tartaric acid or oxalic acid (sold by the chemical trade) while giving preference to citric acid.**

**2 Run engine warm at medium speed up to approx. 80 °C (176 °F) and hold for approx. 10 minutes at this temperature. Proceed according to item 3 section A "De-oiling".**

**3 Stop engine and permit to cool down to approx. 50 °C (122 °F).**

**4 Completely drain decalcification solution.**

**5 Flush cooling system at least three times with fresh water while running engine for at least 5 minutes with each flushing charge.**

**Badly calcified cooling systems may require a repetition of the treatment. Always prepare a fresh de-calcification solution and repeat flushing steps.**

**6 Install coolant thermostat with new sealing ring (20–110).**

**7 On model 116, connect heating water pump again to electric supply line.**

**8 Fill cooling system with specified coolant (20–010).**

**Note:** For decalcification and derusting, commercial products made with the acids named above may also be used.

Chromic acid or products containing chromates are prohibited by sewage regulations.